

HOOT CH DETECTOR IS LATEST GIFT TO WORLD OF SCIENCE

User Can Tell How Much
He Has Absorbed and
Its Per Cent.

NEEDLE WARNS OF JAG
Emotions Recorded as Long
as One Can Hang Onto
Knobs.

RAP AT EVANGELISTS

Analytical Microscopes Show
They Exhort Much With
Little Knowledge.

Special Despatch to THE NEW YORK HERALD.
CHICAGO, Dec. 30.—The latest invention described at the meeting of the chemists' branch of the American Association for the Advancement of Science was offered to-day by W. R. Miles of the Carnegie Nutritional Institute of Boston. It is modern and timely and it comes in the form of a machine—the "hoot detector."

With the aid of this machine it is said to be possible to gauge almost to a drink the amount of liquor a man has consumed. With its aid an alcoholic enthusiast can determine to a fractional per cent. if the bartender told the truth about the strength of the drink he served.

The machine is simple enough in operation, according to the description. There are two knobs which the subject grasps. Electric currents swing into the knobs and the subject is "disturbed."

Just how much he is disturbed is indicated on a gauge which is normal at zero; that is the point on which the subject must keep the gauge needle if he is to convince the observer of his sobriety. The machine, according to its inventor, also will record the reactions of a subject reading Shakespeare and the activity of other emotions produced by other causes. The inventor's description of the apparatus follows:

Description by Inventor.
"This is a new apparatus for measuring the adequacy of eye and hand coordination, which probably is one of the most important forms of human behavior to measure in connection with industrial factors, such as fatigue, industrial relation and so forth."

"The subject under test observes a wattmeter with zero centre scale and by the manipulation of a rheostat tries continually to maintain a balance between two opposing electrical currents."

"The task is fairly uniform in nature, but so varied as to the direction, amplitude of fluctuation and rate of change in the current strength of one of the circuits as to require constant attention from the reactor."

"The disturbance mechanism can be regulated to provide tasks of varying difficulties. The errors of compensation are integrated in two meters from which the score combines with quickness and accuracy, and the smaller the meter reading is the better the performance is."

Proof that the world is lying in a huge magnetic field of an origin unknown but foreign to itself, with a faculty for making more trouble for the mind than it passes in certain circumstances than Senator Johnson did with the peace treaty, was submitted by Prof. Louis A. Bauer.

The experiments which enabled Prof. Bauer to make this announcement covered a long period, and included observations of the magnetic effects of four solar eclipses, coupled with data gathered from the different observatories of the world.

The currents from this field, he asserted, entered the revolving earth in the regions of the two poles as negative waves and emanated at the equator as positive, much after the fashion of the armature of a toy magnet.

Professor Bauer didn't attempt to explain the source of this mysterious energy—he merely contented himself with announcing the proof of its existence. But it may, he thought, be one of the number of retardant forces upon the earth's speed in revolution, and to be responsible for some of the heat which exists beneath the first mile or so of the crust of this planet on which we live.

"I am absolutely convinced," he told his audience, "of the existence of lateral electrical currents which pass directly down into the earth, in addition to those horizontal currents which have been recognized for years."

"Without them, we cannot account for all the earth's magnetism. When all the horizontal electrical forces are reckoned with we have from 2 to 3 per cent. of the earth's magnetism which is caused by these downward positive currents."

Compasses Varied.
During a recent total eclipse Prof. Bauer made extensive magnetic observations. As the light of the earth was cut off by the shadow of the sun the compasses which he and his associates were watching at the different observatories varied in direction.

"Light is a conductor of electricity," he continued. "Shutting off the sun's rays shut off these lateral electric currents and disarranged the earth's magnetic field."

His observations, he also said, indicated a certain magnetic attraction between the earth, Venus and one or two of the other planets.

With the psychologists, Billy Sunday and his fellow revivalists were put under the analytical microscope, so to speak, by Prof. W. T. Shepherd of Washington. Dr. Shepherd watched the revival methods of ten ministers and fifteen professional evangelists. Many of them, he said, made their appeals without knowing why, and a few didn't even study the subject about which they were preaching.

Most of their conversions were made from members of the audiences in the late teens. The appeals were as a rule based on fear of death and hell, a hope of reward and escape to the paradise. Every one of the twenty-five, he said, believed in advertising, and advertised his meetings in some form or another.

PLEA FOR GOLD PRODUCERS.
WASHINGTON, Dec. 30.—Gold producers alone have not profited by increased prices, Representative Baker, Democrat, California, told the House to-day, urging his bill to increase the price of gold \$10 an ounce. He said gold producers were "hard up" and that hundreds of mines were closed, as the metal cost more to mine than it could be sold for.

To-night, first performance at 7:45 sharp; second at 10:45 sharp. Special New Year's Celebration. LAY DOWN EAST, 46th St. Theatre.—Ado.

MARSHALL FIELD 3D AIMS TO PUT CHICAGO ON MAP

Worth a Hundred Million, but Goes Into Banking
With View to Rivaling Big Eastern
Concerns.

Special Despatch to THE NEW YORK HERALD.
CHICAGO, Dec. 30.—Why does a young man with a fortune in excess of \$100,000,000 go to work to earn a living? The question was asked of Marshall Field to-day. Mr. Field is not quite thirty. He has tackled the big American pastime of making two dollars grow where there was only one before. His name in gold and black on the door of his new office, "Marshall Field, Glore, Ward & Co., Investment Bankers, 137 La Salle street."

"I would consider it criminal if I didn't take advantage of my opportunity to assist in the developing of American industry," he answered. "Merely having money is not being creative and not doing one's share toward increasing

the prosperity and stability of the nation. It's using money, becoming a part of the great exchange of ideas, investments, purchases and sales, that makes a man feel he belongs to the life of his country. "I entered the investment security business because that's what I'm most fitted for and what I know most about. You know I was associated with a broker's office before the war. I feel that I belong in one and that by plugging away and not letting up I'll be able to make good."

COLOR LINE ROW IN HOUSE COMMITTEE

Negroes' Association Charges
Wilful Discrimination at
Polls in South.

By the Associated Press.
WASHINGTON, Dec. 30.—Wholesale charges of wilful discrimination against negroes at the polls in the Southern States were made by representatives of the National Association for the Advancement of Colored People to-day before the House Census Committee and brought forth vigorous objections from committee members from the South. The committee was considering legislation to resportion Congressional representation.

The first charge made by the association's representatives brought on a storm of denials and additional charges that gathered in volume as the session progressed, and reached its climax at the close with the appearance of a photographer to take a group picture of the committee, including its Southern members, witnesses and spectators, of whom a number were negroes.

When Walter F. White, assistant secretary of the organization, declared that the majority of the white population of many Southern communities were "lawless" Southern members of the committee jumped to their feet. "I decline to sit with a man who makes wholesale charges of slander against one section of the United States," exclaimed Representative Larsen, Democrat, Oregon. "Let them confine themselves to facts within their personal knowledge and not rest their case upon hearsay reports."

Representatives Seg, Democrat, Texas, and Aswell, Democrat, Louisiana, seconded his Georgia colleague in energetic fashion.

Chairman Siegel at this point interjected to say that the committee had decided to let the witnesses make their statements and members question them afterward.

Charges of disfranchisement of negroes in the South also were made by J. Weldon Johnson, secretary of the association. Representative Larsen rejoined with the assertion that the association was formed by certain whites and negroes to the North to get back to conditions before primaries became general in the South, when, he said, the negro vote was a marketable commodity.

The appearance of the photographers to "snap" the committee caused Southern members to declare they would not sit in a group the background of which was formed of negroes, a large number of whom were crowded into the room. Representative Aswell left the room, and Representative Larsen informed Chairman Siegel he did not intend leaving the room and would "raise hell" if the picture were made with the spectators on hand as a background. The committee finally went into executive session, thus clearing the room, and the group picture was made.

PENROSE IN CAPITAL FOR TARIFF FIGHT

Is Opposed to One Year
Emergency Legislation.

Special Despatch to THE NEW YORK HERALD.
New York Herald Bureau.
Washington, D. C., Dec. 30.

Senator Penrose (Pa.), chairman of the Finance Committee, arrived in Washington to-night with the expectation of remaining during the session. It is believed he will fight enactment of the one year emergency tariff legislation passed by the House, although it is not clear to what extent he will carry his opposition.

Senator McCumber (N. D.), acting chairman of the committee, said he had received no word from Senator Penrose that the latter would take an active part in tariff legislation at this session.

"I hope Senator Penrose will be well enough to resume his duties as chairman of the committee," said Senator McCumber.

Senator Penrose is said to have informed close friends that he is much opposed to "piecemeal tariff legislation" such as has been undertaken in the one year tariff bill now before the Finance Committee.

NEW YORK MAN HONORED.
WASHINGTON, Dec. 30.—Dr. James J. Walsh, New York, was elected president to-day of the American Catholic Historical Association, in annual session here.

Dewey's STANDARD TONICS

Prepared Without Oil
A TRIAL will convince you of
their wonderful tonic effects

—also—
Dew-ol
Hypophosphite, Olive Oil and Port

Dew-fer-ol
Iron, Olive Oil and Port

Still Grape Juice
Sparkling Grapuri
Pure and sterilized in the bottle

Approved by U. S. Revenue
and Prohibition Departments
138 Fulton Street, New York

PEACE IN IRELAND SEEMS AT HAND

Every Effort at Conciliation
Apparently Being Made
on Both Sides.

CLERGY OPPOSE FORCE

Government Will Not Compro-
mise With Murder, but
Offers Remedy.

Special Cable to THE NEW YORK HERALD.
Copyright, 1920, by THE NEW YORK HERALD.
New York Herald Bureau.
London, Dec. 30.

Every effort at conciliation was evident to-night on the Irish political front. Sir Hamar Greenwood, Chief Secretary for Ireland, "We are out for peace."

But the Bishops of Cork and Kilmore joined the Bishops of Tuam and Archesbishop Gilmartin of Tuam in denouncing ambushing, assassination and reprisals. There is reason to believe that the efforts of the United Newspaper Publishers of London to obtain the release of Fitzgerald and Edward, prosecuted by the Government and imprisoned, will be successful. The Star says it knows the report of Gen. Strickland on the Cork burning frankly attributes beginning of the clergy to the blast and Tans, though declaring that the town roughs continued the incendiarism to loot.

But "the military front" is unrelaxed. With the failure of the Irish to surrender their weapons—preferring to risk the punishment of summary execution—there have been further sharp conflicts, both open and of the ambush sort. The crown forces also are intensifying their activities, for the first time raiding a convent in Dublin, from which they turned out the pupils and nuns, although the Bishops reported to have behaved with due courtesy.

Tendency to Hope for Peace.
There is, however, a general tendency in the best informed circles to believe that on the whole the above circumstances spell hope. Particular gratification is expressed among those seeking peace at the new stand taken by the clergy. Hitherto the clergy have tacitly agreed that the Sinn Fein interpretation of Cardinal Mercier's doctrine of resistance to invaders was justified.

There has been the biggest source of strength to the Irish, young men going out by the thousands to face death with the light of martyrs in their eyes. That the clergy is now condemning this practice is taken as an indication that the Sinn Feiners are ready to admit that they can't beat the British Empire by Irish force and that they will ultimately be willing to negotiate.

Archbishop Gilmartin said: "The present circumstance of armed resistance against the existing Government is unlawful, first, because there is no chance for success; secondly, the evils of such a course will be much greater than the evils it would try to remedy. Hence I feel bound to warn the brave young men against rash action. Let them remember that rashness is the coward's crime, while self-restraint is the highest degree of courage."

Government Out for Peace.
Secretary Greenwood says that while the Government "is out for peace" there can be "no compromise with murder." He goes on to praise the Home Rule bill as the historic beginning of a real Irish settlement because that and the bill it removes Ulster from British politics and puts Irish unity up to the Irishmen themselves.

It is also known that Arthur Griffiths, "Acting President" of the Irish Republic, had important visitors at Mountjoy jail to-day, and although De Valera certainly was not among them it is believed that negotiations for peace are now going on under cover just as vigorously as they were a month ago.

The Times this morning said the Cabinet discussed for two hours yesterday the Irish question in its domestic, imperial and international aspects, and added that the Ministers were desirous of taking the first opportunity to talk peace with the representatives of the Irish people.

CHANGES FOR TARIFF BILL.
WASHINGTON, Dec. 30.—Amendments proposing to add pickled cherries, walnuts and filberts to the list of agricultural commodities on which higher duties would be imposed by the pending emergency tariff measure were introduced to-day by Senator McNary, Republican, of Oregon.

Midnight celebration to-night, two complete performances of D. W. Griffith's "WAY DOWN EAST," 7:45 and 10:45—Forty-fourth St. Theatre.—Ado.

HARDING AND KNOX DISCUSS EUROPE

Continued from First Page.

on April 6, 1917, or subsequently seized until:

"The Congress makes disposition thereof;

"Germany by treaty provides for the satisfaction of all American claims;

"Germany by treaty grants American favored nation treatment;

"Germany confirms all fines, seizures, &c., made by the United States of German property during the war."

"3. Requests the President to negotiate a treaty of amity and commerce with Germany."

"4. Repeals all war legislation by Congress."

"5. Provides that until by treaty or acts of Congress it shall be determined otherwise, the United States does not waive its rights under the Treaty of Versailles, the armistice of November 11, 1918, or any extensions, or modifications thereof stipulated for its benefit as one of the principal allied and associated Powers."

"6. Repeals Austrian war resolution."

"To this resolution it is proposed to offer an amendment substantially as follows:

"It is the declared policy of the United States in order to meet fully and fairly our obligations to ourselves and to the world that, the freedom and peace of Europe being again threatened by any Power or combination of Powers, the United States will regard such a situation with grave concern, as a menace to its own peace and freedom, will consult with other Powers affected with a view to devising means for the removal of such menace, and will, the necessity arising in the future, cooperate with the friends of civilization for its defence."

The passage of this resolution as amended, said Senator Knox, "would provide a simple and customary method of adjusting our relations with Germany. The declaration of a policy such as indicated, followed by a similar declaration by other nations, would constitute an association of nations bound together by a common purpose that (as I have said on another occasion) neither parchment, sealing wax, signatures nor blue ribbons could make more obligatory or effective. Such a declaration of policy would not interfere with the codification of international law, the creation of a court to decide international differences of a justifiable character, the appointment of commissions to investigate political questions that threaten war for the purpose of enlightening the public opinion of the world upon the merits of the questions involved or any other measures, including disarmament, that might be agreed upon by the nations to lessen the probability of war."

"On the other hand, it would stand in the background as a great moral force, whose tendency should be to encourage nations to agree. Such a policy does not subject this nation's judgment and conscience as to its vital interests or its war making prerogative to the will of a foreign counsel. It is a mere recognition of the fact that a menace of Europe by the domination of aggressive military powers in this century is a menace also to our safety."

"If that had been the avowed and understood policy of the United States before July, 1914, it is in my judgment, very improbable the war would have occurred."

CIVIL SERVICE FOR DRY AIDS.
WASHINGTON, Dec. 30.—Federal officers and agents employed to enforce national prohibition would be put under the civil service by a bill introduced to-day by Senator Sterling, Republican, South Dakota.

TRIMO
THE WORD THAT STANDS FOR
Superior
Pipe Wrenches
AND
Monkey Wrenches
FOR
SHOP, HOME AND FARM

Trimmo Wrenches for sale everywhere: with Steel Frames that will not break; Nut Guards that prevent the turning of the nut in close quarters.

FOR SALE BY ALL DEALERS
TRIMMO MFG. CO., 101 LAFAYETTE ST., NEW YORK
FACTORY: ROXBURY, BOSTON, MASS.

OUR CENTENARY SALE
will close on December 31st, the time when our January reductions customarily go into effect. We have therefore decided to combine both.

For the Final Day
in addition to the present substantial reductions which the Centenary Sale offers, will be added further reductions which we ordinarily make in January.

This Applies to the Entire Stock
Furriers exclusively for one hundred years

G. C. RICKARDS CHIEF OF MILITIA BUREAU

President Appoints Pennsylvanian Under Army Reorganization Act.

WASHINGTON, Dec. 30.—Col. George C. Rickards of Oil City, Pa., was appointed to-day by President Wilson as chief of the Militia Bureau of the War Department.

Col. Rickards will have the rank of major general and will be the first National Guard officer to hold this position. Appointment of a Guard officer who is a member of the reserve corps to this post is provided for in the army reorganization bill passed at the last session of Congress.

As chief of the Militia Bureau, Col. Rickards, who has been serving with the general staff, will have supervision over the employment of the National Guard as an integral part of the army of the United States as provided for in the army reorganization act. He will have a number of National Guard officers on his staff and will become a

member of the general staff of the army and chief adviser to the Secretary of War on matters connected with the National Guard.

Col. Rickards commanded the Sixteenth Pennsylvania Infantry from the beginning of the world war until its reorganization as the 12th Infantry of the Twenty-eighth Division. He commanded the Fifty-sixth Brigade of that division and was slightly wounded during the Argonne offensive. He reached the rank of brigadier general in June, 1919, but later reverted to his permanent rank of colonel.

TOPEKA, Dec. 30.—Gov. Henry Allen, when informed to-day that President Wilson had appointed Col. George C. Rickards of Oil City, Pa., as chief of the Militia Bureau of the War Department, declared the President had "ignored the law, which provides that the chief of the Militia Bureau was to be chosen upon recommendation of the Governors of the States."

TIFFANY & Co.

FIFTH AVENUE & 37th STREET

DIAMOND BRACELETS AND
DIAMOND WATCH BRACELETS

Partners of Progress



Without Contract Bonds there could be no great Civic or Industrial Development

The great industrial and commercial enterprises of modern times rest upon the solid foundation of corporate suretyship.

The Contract Bond is the Partner of Progress. It is behind practically every great construction enterprise, and its guaranty has contributed greatly to the upbuilding of the Nation.

This Company, with its organization embracing 40 branch offices and over 14,000 local representatives, covering this continent, and with correspondents in many cities throughout the world, has been a potent factor in contributing to the industrial expansion of the Nation.

This comprehensive service, backed by an established reputation for the prompt payment of just claims in accordance with the spirit of the bond, is offered to the contractor who recognizes the manifold advantages of the name of the American Surety Company of New York on the bond which he tenders for the faithful performance of his contract.

American Surety Company
of New York
Home Office, 100 Broadway

C. G. Gunther's Sons

391 Fifth Avenue

OUR CENTENARY SALE

will close on December 31st, the time when our January reductions customarily go into effect. We have therefore decided to combine both.

For the Final Day

in addition to the present substantial reductions which the Centenary Sale offers, will be added further reductions which we ordinarily make in January.

This Applies to the Entire Stock

Furriers exclusively for one hundred years



Reciprocate This New Year's

—with a Club Package of fifty or one hundred Herbert Tareyton Cigarettes. It's a "good-fellow" way of saying "Happy New Year!" If by chance he's not already a Tareyton smoker, he'll be particularly grateful for the introduction.

"There's Something About Them You'll Like"

Club packages of one hundred, \$1.45

Club packages of fifty, \$.75

Your dealer or Club has them

Talk Tobacco Co., Inc.
1750 Broadway, New York

